Sequence Search Summary

GenCore version 5.1.6 Copyright (c) 1993 - 2003 Compugen Ltd.

OM nucleic - nucleic search, using sw model

June 10, 2003; 10:05:27; Search time 1382 Seconds Run on:

(without alignments)

9413.136 Million cell updates/sec

Title: US-09-942-407-1

Perfect score: 447

1 atgagtaatgaggatctttt.....cccagtacccgaagaactga 447 Sequence:

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 2054640 seqs, 14551402878 residues

4109280 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

SEQ ID NO:1 Listing first 45 summaries

Database : GenEmbl:*

1: gb ba:*

2: gb htg:*

3: gb in:*

4: gb_om:*

5: gb_ov:*

6: gb_pat:*

7: gb ph:*

8: gb_pl:*

9: gb_pr:*

10: gb_ro:*

11: gb sts:*

12: gb sy:*

13: gb un:*

14: gb vi:*

15: em_ba:*

16: em_fun:* 17: em_hum:*

18: em in:*

19: em_mu:*

20: em om:*

21: em or:*

22: em ov:*

23: em_pat:*

24: em_ph:*

25: em pl:*

26: em ro:*

27: em sts:*

```
28: em_un:*
29: em_vi:*
30: em_htg_hum:*
31: em_htg_inv:*
32: em_htg_other:*
33: em_htg_mus:*
34: em_htg_pln:*
35: em_htg_rod:*
36: em_htg_mam:*
37: em_htg_vrt:*
38: em_sy:*
39: em_htgo_hum:*
40: em_htgo_mus:*
41: em_htgo_other:*
```

| Res | | _ | Query | | | | |
|-----|-----|-------|-------|--------|----|------------|--------------------|
| | No. | Score | Match | Length | DB | ID | Description |
| | 1 | 447 | 100.0 | 447 | 1 | AY046899 | AY046899 Propionib |
| | 2 | 447 | 100.0 | 447 | 6 | AX128594 | AX128594 Sequence |
| | 3 | 447 | 100.0 | 833 | 1 | AF454511 | AF454511 Propionib |
| С | 4 | 131.8 | 29.5 | 30253 | 1 | SC8F4 | AL137242 Streptomy |
| | 5 | 122.2 | 27.3 | 453 | 6 | AX121431 | AX121431 Sequence |
| С | 6 | 122.2 | 27.3 | 333150 | 1 | AP005277 | AP005277 Corynebac |
| С | 7 | 122.2 | 27.3 | 349980 | 6 | AX127147 | AX127147 Sequence |
| С | 8 | 93 | 20.8 | 17963 | 1 | AE007009 | AE007009 Mycobacte |
| С | 9 | 93 | 20.8 | 32514 | 1 | MTCY130 | Z73902 Mycobacteri |
| | 10 | 93 | 20.8 | 37036 | 1 | MSGY151 | AD000018 Mycobacte |
| | 11 | 87.2 | 19.5 | 36470 | 1 | U00014 | U00014 Mycobacteri |
| C | 12 | 87.2 | 19.5 | 332450 | 1 | MLEPRTN5 | AL583921 Mycobacte |
| | 13 | 72.8 | 16.3 | 12249 | 1 | AE002039 | AE002039 Deinococc |
| С | 14 | 62.4 | 14.0 | 10670 | 1 | AE005001 | AE005001 Halobacte |
| С | 15 | 57.2 | 12.8 | 10262 | 1 | AE005867 | AE005867 Caulobact |
| | 16 | 56.6 | 12.7 | 1288 | 6 | AR007563 | AR007563 Sequence |
| С | 17 | 56.6 | 12.7 | 11477 | 1 | AE009554 | AE009554 Brucella |
| | 18 | 53.8 | 12.0 | 1401 | 3 | ACU29610 | U29610 Acanthaoeba |
| С | 19 | 53.8 | 12.0 | 45335 | 1 | SCC57A | AL136519 Streptomy |
| C | 20 | 52 | 11.6 | | 1 | AL646080 | AL646080 Ralstonia |
| C | 21 | 50.8 | 11.4 | 65140 | 6 | AX211705 | AX211705 Sequence |
| C | 22 | 50.8 | | 113193 | 1 | AF357202 | AF357202 Streptomy |
| C | 23 | 50.8 | | 123580 | 1 | AF263912 | AF263912 Streptomy |
| С | 24 | 50.8 | | 125401 | 6 | AX211739 | AX211739 Sequence |
| | 25 | 50.4 | | 167350 | 2 | AC129717 | AC129717 Oryza sat |
| | 26 | 50.4 | | 299350 | 1 | SME591786 | AL591786 Sinorhizo |
| | 27 | 50.2 | 11.2 | 13367 | 1 | AE005105 | AE005105 Halobacte |
| | 28 | 49.6 | 11.1 | 1220 | 8 | MZETASSELS | L20621 Zea mays al |
| | 29 | 49.6 | 11.1 | 1236 | 6 | AR007558 | AR007558 Sequence |
| С | 30 | 49.6 | | 205050 | 1 | AL646082 | AL646082 Ralstonia |
| | 31 | 49.2 | 11.0 | 982 | 8 | AF377767 | AF377767 Zea mays |
| | 32 | 49.2 | 11.0 | 1018 | 8 | AF377747 | AF377747 Zea mays |
| | 33 | 49.2 | 11.0 | 1018 | 8 | AF377757 | AF377757 Zea mays |

OM nucleic - nucleic search, using sw model

Run on: June 10, 2003, 09:04:31; Search time 179 Seconds

(without alignments)

5623.705 Million cell updates/sec

Title: US-09-942-407-1

Perfect score: 447

Sequence: 1 atgagtaatgaggatctttt.....cccagtacccgaagaactga 447

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 2185239 segs, 1125999159 residues

Total number of hits satisfying chosen parameters: 4370478

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: N Geneseg 101002:*

1: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1980.DAT:*

2: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1981.DAT:*

3: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1982.DAT:*

: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:*

5: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1984.DAT:*

6: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:*

7: /SIDS2/gcgdata/geneseg/genesegn-embl/NA1986.DAT:*

8: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1987.DAT:*

9: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1988.DAT:*

10: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1989.DAT:*

11: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1990.DAT:*

12: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1991.DAT:*

13: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1992.DAT:*

14: /SIDS2/gcgdata/geneseg/genesegn-embl/NA1993.DAT:*

15: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1994.DAT:*

16: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1995.DAT:*

17: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1996.DAT:*

18: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1997.DAT:*

19: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1998.DAT:*

20: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1999.DAT:*

21: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2000.DAT:*

22: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2001A.DAT:*

23: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA2001B.DAT:*

24: /SIDS2/gcgdata/geneseq/geneseqn-emb1/NA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| Res | sult | | Query | | | | |
|-----|------|-------|-------|---------|----|----------|--------------------|
| | No. | Score | _ | Length | DB | ID | Description |
| | 1 | 447 | 100.0 | 447 | 22 | AAH19868 | Propionibacterium |
| | 2 | 122.2 | 27.3 | 453 | 22 | AAH66312 | C glutamicum codin |
| С | 3 | 122.2 | 27.3 | 349980 | 22 | AAH68528 | C glutamicum codin |
| | 4 | 110.8 | 24.8 | 9407 | 23 | AAS59606 | Propionibacterium |
| C | 5 | 93 | 20.8 | 4403765 | 22 | AAI99683 | Mycobacterium tube |
| С | 6 | 93 | | 4411529 | 22 | | Mycobacterium tube |
| | 7 | 51.4 | 11.5 | 644 | 21 | AAC44798 | Zea mays DNA fragm |
| С | 8 | 50.8 | 11.4 | 65140 | 22 | AAD17184 | Streptomyces nours |
| С | 9 | 50.8 | 11.4 | 125401 | 22 | AAD17186 | Streptomyces nours |
| | 10 | 49.6 | 11.1 | 1236 | 16 | AAT45060 | Maize Ts2 cDNA nuc |
| С | 11 | 47.8 | 10.7 | 21185 | 21 | AAA63350 | Streptomyces globi |
| С | 12 | 47.8 | 10.7 | 63164 | 21 | AAA63348 | Streptomyces globi |
| | 13 | 47.4 | 10.6 | 1620 | 13 | AAQ22482 | groEL-1 gene codin |
| | 14 | 47.4 | 10.6 | 2167 | 13 | AAQ22484 | gro es el operon w |
| | 15 | 47.4 | 10.6 | 2668 | 13 | AAQ22485 | groEL-1 gene. Str |
| С | 16 | 47.2 | 10.6 | 88421 | 24 | AAL40781 | 88421nt genomic DN |
| | 17 | 46.4 | 10.4 | 6781 | 19 | AAV45824 | Maize phosphenolpy |
| | 18 | 45.8 | 10.2 | 1320 | 13 | AAQ22481 | groEL-1 gene parti |
| С | 19 | 45 | 10.1 | 77536 | 21 | AAA14651 | Nucleotide sequenc |
| | 20 | 44.6 | 10.0 | 970 | 24 | AAI69374 | Streptomyces sp L- |
| | 21 | 44.6 | 10.0 | 2061 | 24 | AAI69367 | Streptomyces sp L- |
| | 22 | 44.2 | 9.9 | 852 | 24 | ABA99451 | Actinoplanes sp DN |
| | 23 | 44.2 | 9.9 | 38064 | 24 | ABA99469 | Actinoplanes sp SE |
| | 24 | 44 | 9.8 | 4044 | 12 | AAQ15154 | Plasmid pHAS2-MCP |
| | 25 | 43.8 | 9.8 | 7559 | 20 | AAV82011 | Maize phosphoenolp |
| | 26 | 43 | 9.6 | 1011 | 24 | ABL88001 | DNA polymerase III |
| | 27 | 43 | 9.6 | 1011 | 24 | ABL88002 | DNA polymerase III |
| | 28 | 43 | 9.6 | 1140 | 24 | ABL61289 | N. uniformis p-hyd |
| | 29 | 42.4 | 9.5 | 58857 | 21 | AAA58471 | Nucleotide sequenc |
| | 30 | 42.4 | 9.5 | 4411529 | 22 | | Mycobacterium tube |
| | 31 | 42.2 | 9.4 | 699 | 23 | AAS51514 | Pseudomonas aerugi |
| | 32 | 42.2 | 9.4 | 3978 | 21 | AAC55785 | Type I polyketide |
| | 33 | 42.2 | 9.4 | 12249 | 21 | AAC55840 | Complete Mitomycin |
| | 34 | 42.2 | 9.4 | 18331 | 21 | AAC55857 | Complete nucleotid |
| | 35 | 42 | 9.4 | 44377 | 18 | AAT78508 | Platenolide syntha |
| | 36 | 42 | 9.4 | 44377 | 18 | AAT80414 | Platenolide syntha |
| С | 37 | 41.8 | 9.4 | 894 | 23 | AAS51512 | Pseudomonas aerugi |
| | 38 | 41.6 | 9.3 | 3059 | | AAN70566 | Sequence encoding |
| | 39 | 41.6 | 9.3 | 7110 | 22 | AAF81361 | Quorum sensing con |
| | 40 | 41.4 | | 4403765 | 22 | | Mycobacterium tube |
| | 41 | 41.2 | 9.2 | 5836 | 23 | AAS86905 | DNA encoding novel |
| | 42 | 41 | 9.2 | 2302 | 21 | AAA15621 | Human heat shock p |
| | 43 | 40.8 | 9.1 | 2602 | 24 | ABK27559 | DNA encoding Chlam |
| | 44 | 40.8 | 9.1 | 3993 | 12 | AAQ15153 | Swine herpes virus |
| | 45 | 40.8 | 9.1 | 65140 | 22 | AAD17184 | Streptomyces nours |

OM nucleic - nucleic search, using sw model

Run on: June 10, 2003, 10:56:32; Search time 118 Seconds

(without alignments)

5301.637 Million cell updates/sec

Title: US-09-942-407-1

Perfect score: 447

Sequence: 1 atgagtaatgaggatctttt.....cccagtacccgaagaactga 447

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 870385 seqs, 699768693 residues

Total number of hits satisfying chosen parameters: 1740770

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: Published Applications NA:*

1: /cgn2 6/ptodata/2/pubpna/US07 PUBCOMB.seq:*

2: /cgn2 6/ptodata/2/pubpna/PCT NEW PUB.seq:*

3: /cgn2 6/ptodata/2/pubpna/US06 NEW PUB.seq:*

4: /cgn2_6/ptodata/2/pubpna/US06_PUBCOMB.seq:*

c: /cgn2 6/ptodata/2/pubpna/US07 NEW PUB.seq:*

: /cgn2 6/ptodata/2/pubpna/PCTUS PUBCOMB.seq:*

7: /cgn2 6/ptodata/2/pubpna/US08 NEW PUB.seq:*

8: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:*

9: /cgn2 6/ptodata/2/pubpna/US09 NEW PUB.seq:*

10: /cgn2_6/ptodata/2/pubpna/US09_PUBCOMB.seq:*

11: /cgn2 6/ptodata/2/pubpna/US10 NEW PUB.seq:*

12: /cgn2 6/ptodata/2/pubpna/US10 PUBCOMB.seq:*

13: /cgn2 6/ptodata/2/pubpna/US60 NEW PUB.seg:*

14: /cgn2 6/ptodata/2/pubpna/US60 PUBCOMB.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| Result No. | Score | % Query Match Length | DB | ID | Description |
|---------------|-----------------------|----------------------------|----|--|---|
| 1 2 c 3 | 447 122.2 122.2 | 27.3 453 | 9 | US-09-942-407-1 US-09-738-626-1347 US-09-738-626-1 | Sequence 1, Appli Sequence 1347, Ap Sequence 1, Appli |

OM nucleic - nucleic search, using sw model

June 10, 2003, 10:06:57; Search time 1140 Seconds Run on:

(without alignments)

6350.336 Million cell updates/sec

Title: US-09-942-407-1

Perfect score: 447

Sequence: 1 atgagtaatgaggatctttt.....cccagtacccgaagaactga 447

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 16154066 seqs, 8097743376 residues

Total number of hits satisfying chosen parameters: 32308132

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

EST:* Database :

1: em estba:*

2: em esthum:*

3: em_estin:*
4: em_estmu:*

5: em_estov:*

6: em_estpl:*

7: em estro:*

8: em htc:*

9: gb est1:*

10: gb_est2:*

11: gb htc:*

12: gb_est3:*

13: gb est4:*

14: gb est5:*

15: em estfun:*

16: em estom:*

17: gb gss:*

18: em_gss_hum:*

19: em gss inv:*

20: em_gss_pln:*

21: em_gss_vrt:*

22: em_gss_fun:*

23: em_gss_mam:*

24: em_gss_mus:*

25: em_gss_other:*

26: em gss pro:*

27: em_gss_rod:*

| | | | 8 | | | | | |
|-----|-----|-------|-------|--------|----|----------|-------------------|---|
| Res | ult | | Query | | | | | |
| | No. | Score | Match | Length | DB | ID | Description | |
| | | | | | | | | |
| | 1 | 56.2 | 12.6 | 582 | 13 | BM356337 | | |
| | 2 | 51.8 | 11.6 | 670 | 12 | BG847251 | BG847251 1024016E | |
| | 3 | 50.6 | 11.3 | 539 | 13 | BM135667 | | |
| | 4 | 50.6 | 11.3 | 574 | 14 | BQ838343 | BQ838343 WHE2909_ | |
| | 5 | 50 | 11.2 | 527 | 10 | BE430090 | BE430090 TAS006.H | |
| | 6 | 50 | 11.2 | 547 | 14 | BQ240794 | BQ240794 TaE05012 | |
| С | 7 | 47.4 | 10.6 | 1133 | 17 | CNS06RLZ | AL412125 T7 end o | |
| | 8 | 47 | 10.5 | 381 | 10 | AV629941 | AV629941 AV629941 | |
| | 9 | 47 | 10.5 | 490 | 10 | AV642714 | AV642714 AV642714 | |
| | 10 | 47 | 10.5 | 525 | 13 | BM000766 | BM000766 1031091A | |
| | 11 | 47 | 10.5 | 536 | 13 | BI727253 | BI727253 1031091A | |
| С | 12 | 46.4 | 10.4 | 925 | 17 | CNS0091P | AL053013 Drosophi | 1 |
| | 13 | 46 | 10.3 | 850 | 10 | BE194762 | BE194762 HVSMEh00 | 8 |
| | 14 | 45.8 | 10.2 | 426 | 13 | BI779862 | BI779862 EBem07 S | Q |
| | 15 | 45.8 | 10.2 | 768 | 13 | BI999409 | BI999409 1031073E | 0 |
| | 16 | 45.8 | 10.2 | 866 | 12 | BG368927 | BG368927 HVSMEi00 | |
| | 17 | 45.8 | 10.2 | 944 | 12 | BG122847 | BG122847 60234892 | |
| | 18 | 45.6 | 10.2 | 484 | 10 | AV619352 | AV619352 AV619352 | |
| | 19 | 45.4 | 10.2 | 504 | 10 | BE498454 | BE498454 WHE0967 | |
| | 20 | 45 | 10.1 | 1304 | 14 | BQ440317 | BQ440317 AGENCOUR | |
| | 21 | 44.8 | 10.0 | 925 | 17 | CNS0091P | AL053013 Drosophi | |
| | 22 | 44.8 | 10.0 | 1101 | 17 | CNS017SY | AL108460 Drosophi | |
| | 23 | 44.8 | 10.0 | 2985 | 11 | AY110048 | AY110048 Zea mays | |
| С | 24 | 44.4 | 9.9 | 485 | 14 | BQ662567 | BQ662567 HS03A03u | |
| | 25 | 44.4 | 9.9 | 506 | 12 | BG369860 | BG369860 HVSMEi00 | |
| | 26 | 44.4 | 9.9 | 555 | 12 | BG909521 | BG909521 TaLr1104 | |
| | 27 | 44.4 | 9.9 | 559 | 12 | BG368967 | BG368967 HVSMEi00 | |
| | 28 | 44.4 | 9.9 | 587 | 14 | BQ466460 | BQ466460 HT02J12r | |
| | 29 | 44.4 | 9.9 | 619 | 12 | BG368681 | BG368681 HVSMEi00 | |
| | 30 | 44.4 | 9.9 | 758 | 12 | BG365691 | BG365691 HVSMEi00 | |
| | 31 | 44.4 | 9.9 | 855 | 10 | BE194372 | BE194372 HVSME100 | |
| | 32 | 44.4 | 9.9 | 881 | 10 | BE454755 | | |
| | 33 | 44.4 | 9.9 | 459 | 13 | | BE454755 HVSMEh00 | |
| | 34 | 44.2 | 9.9 | 439 | | BJ224347 | BJ224347 BJ224347 | |
| | | | | | 12 | BF250394 | BF250394 pa98f04. | |
| | 35 | 44.2 | 9.9 | 494 | 12 | BF250354 | BF250354 pa98b06. | |
| | 36 | 44.2 | | 628 | 13 | BJ281512 | BJ281512 BJ281512 | |
| | 37 | 44.2 | 9.9 | 643 | 9 | AL828220 | AL828220 AL828220 | |
| | 38 | 44.2 | 9.9 | 645 | 13 | BJ313569 | BJ313569 BJ313569 | |
| | 39 | 44.2 | 9.9 | 650 | 13 | BJ268932 | BJ268932 BJ268932 | _ |
| | 40 | 44.2 | 9.9 | 675 | 13 | BI723038 | BI723038 1031065F | 0 |
| | 41 | 44.2 | 9.9 | 679 | 13 | BJ246201 | BJ246201 BJ246201 | |
| | 42 | 44 | 9.8 | 291 | 14 | BQ819833 | BQ819833 1030080F | 0 |
| | 43 | 44 | 9.8 | 323 | 10 | AV639250 | AV639250 AV639250 | |
| | 44 | 44 | 9.8 | 346 | 10 | AV388606 | AV388606 AV388606 | |
| | 45 | 44 | 9.8 | 361 | 10 | AV397833 | AV397833 AV397833 | |
| | | | | | | | | |

OM nucleic - nucleic search, using sw model

Run on: June 10, 2003, 10:26:02; Search time 42 Seconds

(without alignments)

3263.917 Million cell updates/sec

Title: US-09-942-407-1

Perfect score: 447

Sequence: 1 atgagtaatgaggatctttt.....cccagtacccgaagaactga 447

Scoring table: IDENTITY NUC

Gapop 10.0 , Gapext 1.0

Searched: 441362 seqs, 153338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: Issued Patents NA:*

1: /cgn2 6/ptodata/1/ina/5A COMB.seq:*

2: /cgn2 6/ptodata/1/ina/5B COMB.seq:*

3: /cgn2 6/ptodata/1/ina/6A COMB.seq:*

4: /cgn2_6/ptodata/1/ina/6B_COMB.seq:*

5: /cgn2 6/ptodata/1/ina/PCTUS COMB.seq:*

6: /cgn2 6/ptodata/1/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| Res | ult No. | Score | % Query Match | Length I | DВ | ID | Description |
|-----|------------|-------|---------------------|----------|----|------------------|-------------------|
| c | 1 | 93 | 20.8 | 4403765 | 4 | US-09-103-840A-2 | Sequence 2, Appli |
| С | 2 | 93 | 20.8 | 4411529 | 4 | US-09-103-840A-1 | Sequence 1, Appli |
| | 3 | 56.6 | 12.7 | 1288 | 1 | US-08-440-856A-9 | Sequence 9, Appli |
| | 4 | 49.6 | 11.1 | 1236 | 1 | US-08-440-856A-1 | Sequence 1, Appli |
| | 5 | 47.4 | 10.6 | 1320 | 2 | US-08-461-775-8 | Sequence 8, Appli |
| | 6 | 47.4 | 10.6 | 1320 | 3 | US-09-031-606-8 | Sequence 8, Appli |
| | 7 | 47.4 | 10.6 | 1620 | 2 | US-08-461-775-10 | Sequence 10, Appl |
| | 8 | 47.4 | 10.6 | 1620 | 3 | US-09-031-606-10 | Sequence 10, Appl |
| | 9 | 47.4 | 10.6 | 2167 | 2 | US-08-461-775-9 | Sequence 9, Appli |
| | 10 | 47.4 | 10.6 | 2167 | 3 | US-09-031-606-9 | Sequence 9, Appli |
| | 11 | 47.4 | 10.6 | 2668 | 2 | US-08-461-775-11 | Sequence 11, Appl |
| | | | | | | | |

OM protein - nucleic search, using frame plus p2n model June 10, 2003, 11:16:42; Search time 2177 Seconds Run on: (without alignments) 1978.510 Million cell updates/sec Title: US-09-942-407-2 Perfect score: 796 1 MSNEDLFICIDHVAYACPDA......FMHPKSGKGVLIELTQYPKN 148 Sequence: Scoring table: BLOSUM62 SEO ID NO: 2 in DNA databases Xgapop 10.0 , Xgapext 0.5 Ygapop 10.0 , Ygapext 0.5 Fgapop 6.0 , Fgapext 7.0 Delop 6.0 , Delext 7.0 Searched: 2054640 seqs, 14551402878 residues Total number of hits satisfying chosen parameters: 4109280 Minimum DB seq length: 0 Maximum DB seq length: 2000000000 Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Command line parameters: -MODEL=frame+ p2n.model -DEV=xlh Q=/cgn2 1/USPTO spool/US09942407/runat 04062003 144515 9416/app query.fasta 1.32 -DB=GenEmbl -QFMT=fastap -SUFFIX=rge -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -USER=US09942407 @CGN 1 1 2496 @runat 04062003 144515 9416 -NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7 Database : GenEmbl:* 1: gb ba:* 2: gb htg:* 3: gb in:* 4: gb om:* 5: gb ov:* 6: gb pat:* 7: gb_ph:* 8: gb pl:*

9: gb_pr:*
10: gb ro:*

```
11: gb_sts:*
12: gb_sy:*
13: gb un:*
14: gb vi:*
15: em ba:*
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17: em_hum:*
18: em_in:*
19: em_mu:*
20: em om:*
21: em or:*
22: em ov:*
23: em_pat:*
24: em_ph:*
25: em_pl:*
26: em ro:*
27: em sts:*
28: em un:*
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31: em_htg_inv:*
32: em_htg_other:*
33: em htg mus:*
34: em_htg_pln:*
35: em_htg_rod:*
36:
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37:
    em_htg_vrt:*
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40:
    em htgo mus:*
    em_htgo_other:*
```

| | | | 8 | | | | |
|-----|-----|-------|-------|--------|----|----------|--------------------|
| Res | ult | | Query | | | | |
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| | | 706 | 100.0 | | | | 7.04.6000 B |
| | 1 | 796 | 100.0 | 447 | 1 | AY046899 | AY046899 Propionib |
| | 2 | 796 | 100.0 | 447 | 6 | AX128594 | AX128594 Sequence |
| | 3 | 796 | 100.0 | 833 | 1 | AF454511 | AF454511 Propionib |
| | 4 | 358 | 45.0 | 453 | 6 | AX121431 | AX121431 Sequence |
| С | 5 | 358 | 45.0 | 333150 | 1 | AP005277 | AP005277 Corynebac |
| С | 6 | 358 | 45.0 | 349980 | 6 | AX127147 | AX127147 Sequence |
| C | 7 | 300 | 37.7 | 30253 | 1 | SC8F4 | AL137242 Streptomy |
| | 8 | 289.5 | 36.4 | 36470 | 1 | U00014 | U00014 Mycobacteri |
| С | 9 | 289.5 | 36.4 | 332450 | 1 | MLEPRTN5 | AL583921 Mycobacte |
| С | 10 | 266 | 33.4 | 17963 | 1 | AE007009 | AE007009 Mycobacte |
| С | 11 | 266 | 33.4 | 32514 | 1 | MTCY130 | Z73902 Mycobacteri |
| | 12 | 266 | 33.4 | 37036 | 1 | MSGY151 | AD000018 Mycobacte |
| | 13 | 235 | 29.5 | 11261 | 1 | AE006842 | AE006842 Sulfolobu |
| | 14 | 226.5 | 28.5 | 291050 | 1 | AP000982 | AP000982 Sulfolobu |
| С | 15 | 219 | 27.5 | 13610 | 1 | AE013181 | AE013181 Thermoana |
| | 16 | 214 | 26.9 | 13667 | 1 | AE013084 | AE013084 Thermoana |

OM protein - nucleic search, using frame plus p2n model June 10, 2003, 11:15:42; Search time 205 Seconds Run on: (without alignments) 1625.833 Million cell updates/sec Title: US-09-942-407-2 Perfect score: 796 Sequence: 1 MSNEDLFICIDHVAYACPDA.....FMHPKSGKGVLIELTQYPKN 148 Scoring table: BLOSUM62 Xgapop 10.0 , Xgapext 0.5 Ygapop 10.0 , Ygapext 0.5 Fgapop 6.0 , Fgapext 7.0 Delop 6.0 , Delext 7.0 Searched: 2185239 seqs, 1125999159 residues Total number of hits satisfying chosen parameters: 4370478 Minimum DB seq length: 0 Maximum DB seq length: 2000000000 Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Command line parameters: -MODEL=frame+ p2n.model -DEV=x1h Q=/cgn2_1/USPTO_spool/US09942407/runat_04062003 144514 9410/app query.fasta 1.32 -DB=N_Geneseq_101002 -QFMT=fastap -SUFFIX=rng -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST-45 -DOCALIGN=200 -THR_SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -USER=US09942407 @CGN 1 1 263 @runat 04062003 144514 9410 -NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7 N Geneseq_101002:* Database : 1: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1980.DAT:* /SIDS2/gcgdata/geneseq/genesegn-embl/NA1981.DAT:* 3: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1982.DAT:* /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1983.DAT:* 5: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1984.DAT:* 6: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1985.DAT:* 7: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1986.DAT:* 8: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1987.DAT:* 9: /SIDS2/gcgdata/geneseq/geneseqn-embl/NA1988.DAT:*

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```

SUMMARIES

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| | | | * | | | | |
|-----|-----|-------|-------|----------|------|----------|--------------------|
| Res | ult | | Query | | | | |
| | No. | Score | Match | Length I | DB : | ID | Description |
| | 1 | 796 | 100.0 | 447 | 22 | AAH19868 | Propionibacterium |
| | 2 | 358 | 45.0 | 453 | 22 | AAH66312 | C glutamicum codin |
| С | 3 | 358 | 45.0 | 349980 | 22 | AAH68528 | C glutamicum codin |
| | 4 | 291 | 36.6 | 9407 | 23 | AAS59606 | Propionibacterium |
| C | 5 | 266 | 33.4 | 4403765 | 22 | AAI99683 | Mycobacterium tube |
| С | 6 | 266 | 33.4 | 4411529 | 22 | AAI99682 | Mycobacterium tube |
| С | 7 | 209.5 | 26.3 | 651 | 24 | ABK63022 | Rat sequence diffe |
| С | 8 | 201.5 | 25.3 | 349980 | 22 | AAF86431 | Pyrococcus abyssi |
| | 9 | 196.5 | 24.7 | 849 | 22 | AAH24909 | Nucleotide sequenc |
| | 10 | 196.5 | 24.7 | 873 | 22 | AAK52120 | Human polynucleoti |
| С | 11 | 196.5 | 24.7 | 912 | 22 | AAK53104 | Human polynucleoti |
| | 12 | 176.5 | 22.2 | 958 | 21 | AAA02656 | Human colon cancer |
| С | 13 | 139.5 | 17.5 | 567 | 24 | ABK54779 | Human colon cancer |
| | 14 | 102 | 12.8 | 21299 | 22 | AAK89787 | Human digestive sy |
| | 15 | 96 | 12.1 | 6720 | 20 | AAX13258 | Enterococcus faeca |
| С | 16 | 90.5 | 11.4 | 608 | 24 | ABQ66323 | Arabidopsis thalia |
| | 17 | 90.5 | 11.4 | 648 | 21 | AAC45058 | Arabidopsis thalia |
| | 18 | 90 | 11.3 | 1126 | 21 | AAC36238 | Arabidopsis thalia |
| | 19 | 90 | 11.3 | 1186 | 21 | AAC33853 | Arabidopsis thalia |
| | 20 | 90 | 11.3 | 1216 | 21 | AAC33384 | Arabidopsis thalia |
| | 21 | 90 | 11.3 | 1217 | 21 | AAC45391 | Arabidopsis thalia |
| | 22 | 89.5 | 11.2 | 651 | 21 | AAC40420 | Arabidopsis thalia |
| | 23 | 89 | 11.2 | 1257 | 23 | AAS54143 | Pseudomonas aerugi |
| | 24 | 88.5 | 11.1 | 482 | 20 | AAX13281 | Enterococcus faeca |
| | 25 | 88.5 | 11.1 | 1766 | 19 | AAV04490 | Corn p-hydroxyphen |
| | 26 | 88 | 11.1 | 1166 | 24 | ABQ72545 | Human MDDT encodin |
| | 27 | 87.5 | 11.0 | 384 | 24 | ABK73111 | Bacillus lichenifo |
| | 28 | 87.5 | 11.0 | 1555 | 23 | ABL12133 | Drosophila melanog |
| | 29 | 86.5 | 10.9 | 291 | 24 | ABK73137 | Bacillus lichenifo |
| С | 30 | 85 | 10.7 | 30159 | 23 | AAS59564 | Propionibacterium |
| | 31 | 84.5 | 10.6 | 4770 | 23 | ABL21665 | Drosophila melanog |
| С | 32 | 84.5 | 10.6 | 9718 | 23 | ABL21664 | Drosophila melanog |
| | 33 | 84.5 | 10.6 | 1664976 | 19 | AAV21209 | Methanococcus jann |

OM protein - nucleic search, using frame plus p2n model June 10, 2003, 12:39:53; Search time 139 Seconds Run on: (without alignments) 1490.155 Million cell updates/sec Title: US-09-942-407-2 Perfect score: 796 Sequence: 1 MSNEDLFICIDHVAYACPDA.....FMHPKSGKGVLIELTQYPKN 148 Scoring table: BLOSUM62 Xgapop 10.0 , Xgapext 0.5 Ygapop 10.0 , Ygapext 0.5 Fgapop 6.0 , Fgapext 7.0 Delop 6.0 , Delext 7.0 Searched: 870385 seqs, 699768693 residues Total number of hits satisfying chosen parameters: 1740770 Minimum DB seq length: 0 Maximum DB seq length: 2000000000 Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Command line parameters: -MODEL=frame+_p2n.model -DEV=xlh Q=/cgn2 1/USPTO spool/US09942407/runat 04062003 144516 9495/app query.fasta 1.32 -DB=Published_Applications_NA -QFMT=fastap -SUFFIX=rnpb -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -USER=US09942407_@CGN 1 1 57_@runat_04062003_144516_9495 -NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7 Database : Published Applications NA:* 1: /cgn2_6/ptodata/2/pubpna/US07 PUBCOMB.seq:* /cgn2 6/ptodata/2/pubpna/PCT NEW PUB.seg:* /cgn2 6/ptodata/2/pubpna/US06 NEW PUB.seq:* 4: /cgn2 6/ptodata/2/pubpna/US06 PUBCOMB.seq:* 5: /cgn2 6/ptodata/2/pubpna/US07 NEW PUB.seq:* /cgn2 6/ptodata/2/pubpna/PCTUS PUBCOMB.seq:* 7: /cgn2_6/ptodata/2/pubpna/US08 NEW PUB.seq:* 8: /cgn2_6/ptodata/2/pubpna/US08_PUBCOMB.seq:* 9: /cgn2 6/ptodata/2/pubpna/US09 NEW PUB.seg:*

10: /cgn2 6/ptodata/2/pubpna/US09 PUBCOMB.seg:*

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- 12: /cgn2_6/ptodata/2/pubpna/US10_PUBCOMB.seq:*
- 13: /cgn2_6/ptodata/2/pubpna/US60_NEW_PUB.seq:*
 14: /cgn2_6/ptodata/2/pubpna/US60_PUBCOMB.seq:*

SUMMARIES

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| | ult | | Query | | | | |
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| | No. | Score | Match | Length I | DB | ID | Description |
| | 1 | 796 | 100.0 | 447 | 10 | US-09-942-407-1 | Sequence 1, Appli |
| | 2 | 358 | 45.0 | 453 | 9 | US-09-738-626-1347 | Sequence 1347, Ap |
| C | 3 | 358 | | 3309400 | 9 | US-09-738-626-1 | Sequence 1, Appli |
| С | 4 | 209.5 | 26.3 | 651 | 10 | US-09-917-800A-929 | Sequence 929, App |
| | 5 | 196.5 | 24.7 | 849 | 9 | US-10-168-066-16 | Sequence 16, Appl |
| | 6 | 141.5 | 17.8 | 463 | 10 | US-09-998-598-63 | Sequence 63, Appl |
| С | 7 | 139.5 | 17.5 | 567 | 10 | US-09-919-580-249 | Sequence 249, App |
| | 8 | 137.5 | 17.3 | 1020 | 9 | US-09-791-489-1 | Sequence 1, Appli |
| | 9 | 124 | 15.6 | 257 | 10 | US-09-867-550-547 | Sequence 547, App |
| | 10 | 96 | 12.1 | 6720 | 10 | US-09-070-927A-321 | Sequence 321, App |
| | 11 | 93 | 11.7 | 359 | 10 | US-09-960-352-12234 | Sequence 12234, A |
| | 12 | 93 | 11.7 | 361 | 10 | US-09-960-352-12770 | Sequence 12770, A |
| С | 13 | 90.5 | 11.4 | 608 | 10 | US-09-770-149-900 | Sequence 900, App |
| | 14 | 89 | 11.2 | 1257 | 10 | US-09-815-242-7780 | Sequence 7780, Ap |
| | 15 | 88.5 | 11.1 | 482 | 10 | US-09-070-927A-344 | Sequence 344, App |
| | 16 | 87.5 | 11.0 | 384 | 10 | US-09-974-300-402 | Sequence 402, App |
| | 17 | 86.5 | 10.9 | 291 | 10 | US-09-974-300-428 | Sequence 428, App |
| С | 18 | 84 | 10.6 | 426 | 10 | US-09-880-107 - 2065 | Sequence 2065, Ap |
| | 19 | 84 | 10.6 | 525 | 9 | US-09-938-842A-1000 | Sequence 1000, Ap |
| | 20 | 84 | 10.6 | 797 | 10 | US-09-770-445-828 | Sequence 828, App |
| | 21 | 82.5 | 10.4 | 885 | 9 | US-09-938-842A-7 | Sequence 7, Appli |
| | 22 | 81.5 | 10.2 | 1854 | 9 | US-09-738-626-475 | Sequence 475, App |
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| | 24 | 80.5 | | 1830121 | 9 | US-10-329-960-1 | Sequence 1, Appli |
| | 25 | 79 | 9.9 | 49795 | 9 | US-10-114-170-60 | Sequence 60, Appl |
| | 26 | 78 | 9.8 | 940 | 10 | US-09-791-171-144 | Sequence 144, App |
| | 27 | 77.5 | 9.7 | 1338 | 9 | US-09-938-842A-1440 | Sequence 1440, Ap |
| | 28 | 75.5 | 9.5 | 1488 | 10 | US-09-815-242-4266 | Sequence 4266, Ap |
| | 29 | 75.5 | 9.5 | 1497 | 10 | US-09-815-242-8237 | Sequence 8237, Ap |
| | 30 | 75.5 | 9.5 | 1536 | 10 | US-09-815-242-6640 | Sequence 6640, Ap |
| | 31 | 75.5 | 9.5 | 5445 | 7 | US-08-781-986A-73 | Sequence 73, Appl |
| С | 32 | 74.5 | 9.4 | 1867 | 9 | US-09-888-320-1 | Sequence 1, Appli |
| | 33 | 73.5 | 9.2 | 627 | 10 | US-09-974-300-6072 | Sequence 6072, Ap |
| | 34 | 73.5 | 9.2 | 2133 | 9 | US-09-738-626-7 | Sequence 7, Appli |
| С | 35 | 72.5 | 9.1 | 1153 | 9 | US-10-216-373-7 | Sequence 7, Appli |
| | 36 | 72.5 | 9.1 | 10322 | 7 | US-08-781-986A-98 | Sequence 98, Appl |
| С | 37 | 72 | 9.0 | 2355 | 9 | US-09-842-758-21 | Sequence 21, Appl |
| С | 38 | 71.5 | 9.0 | 10236 | 9 | US-10-091-438-242 | Sequence 242, App |
| С | 39 | 71.5 | 9.0 | 10236 | 9 | US-10-091-438-282 | Sequence 282, App |
| | 40 | 71.5 | 9.0 | 10236 | 10 | US-09-764-853-878 | Sequence 878, App |
| С | 41 | 71 | 8.9 | 483 | 9 | US-09-918-995-6609 | Sequence 6609, Ap |
| | 42 | 71 | 8.9 | 625 | 9 | US-10-108-605-328 | Sequence 328, App |
| | 43 | 71 | 8.9 | 3060 | 9 | US-10-210-965-3 | Sequence 3, Appli |

OM protein - nucleic search, using frame plus p2n model Run on: June 10, 2003, 11:25:17; Search time 1235 Seconds (without alignments) 1940.836 Million cell updates/sec US-09-942-407-2 Title: Perfect score: 796 Sequence: 1 MSNEDLFICIDHVAYACPDA......FMHPKSGKGVLIELTQYPKN 148 Scoring table: BLOSUM62 Xgapop 10.0 , Xgapext 0.5 Ygapop 10.0 , Ygapext 0.5 Fgapop 6.0 , Fgapext 7.0 Delop 6.0 , Delext 7.0 Searched: 16154066 seqs, 8097743376 residues Total number of hits satisfying chosen parameters: 32308132 Minimum DB seq length: 0 Maximum DB seq length: 2000000000 Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Command line parameters: -MODEL=frame+ p2n.model -DEV=xlh Q=/cgn2_1/USPTO_spool/US09942407/runat_04062003_144515_9422/app_query.fasta 1.32 -DB=EST -QFMT=fastap -SUFFIX=rst -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -USER=US09942407_@CGN_1 1 1906_@runat_04062003_144515_9422 -NCPU=6 -ICPU=3 -NO MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV_TIMEOUT=120 -WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7 Database : EST: * 1: em estba:* 2: em esthum:* 3: em_estin:* 4: em_estmu:* 5: em estov:* 6: em estpl:* 7: em estro:* 8: em htc:*

> 9: gb_est1:* 10: gb_est2:*

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25: em_gss_other:*
26: em_gss_pro:*
27: em_gss_rod:*
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| | ult No. | Score | Query | Length | DB | ID | Description |
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| | 2 | 223.5 | 28.1 | 679 | 10 | AW635200 | AW635200 bl30f06.w |
| | 3 | 223.5 | 28.1 | 731 | 10 | AW635277 | AW635277 bl31f05.w |
| | 4 | 210 | 26.4 | 587 | 13 | BI594733 | BI594733 As tgz 43 |
| С | 5 | 209.5 | 26.3 | 570 | 9 | AI411131 | AI411131 EST $\overline{2}$ 394 $\overline{2}$ 5 |
| С | 6 | 209.5 | 26.3 | 574 | 12 | BF282550 | BF282550 EST447141 |
| С | 7 | 209.5 | 26.3 | 651 | 9 | AI172417 | AI172417 EST218424 |
| | 8 | 209 | 26.3 | 582 | 13 | BM356337 | BM356337 kx63a05.y |
| | 9 | 206 | 25.9 | 513 | 13 | BM284249 | BM284249 ki32a02.y |
| | 10 | 206 | 25.9 | 541 | 13 | BM284551 | BM284551 ki60d01.y |
| | 11 | 206 | 25.9 | 561 | 13 | BM319066 | BM319066 ki63h03.y |
| | 12 | 206 | 25.9 | 563 | 13 | BM281610 | BM281610 ki18a01.y |
| | 13 | 206 | 25.9 | 572 | 13 | BM281475 | BM281475 ki33f04.y |
| | 14 | 206 | 25.9 | 576 | 13 | BM281990 | BM281990 ki24a01.y |
| | 15 | 206 | 25.9 | 608 | 13 | BM281639 | BM281639 ki18c05.y |
| | 16 | 206 | 25.9 | 610 | 13 | BM284613 | BM284613 kh97b03.y |
| | 17 | 206 | 25.9 | 617 | 13 | BM515300 | BM515300 kj47c05.y |
| | 18 | 206 | 25.9 | 625 | 13 | BM283874 | BM283874 ki28f05.y |
| | 19 | 206 | 25.9 | 629 | 13 | BM284117 | BM284117 ki30b05.y |
| | 20 | 206 | 25.9 | 631 | 13 | BM566690 | BM566690 kj04f11.y |
| | 21 | 206 | 25.9 | 634 | 13 | BM283587 | BM283587 ki49d07.y |
| | 22 | 206 | 25.9 | 652 | 13 | BM569204 | BM569204 kj45a11.y |
| | 23 | 206 | 25.9 | 674 | 13 | BM515150 | BM515150 kj65a08.y |
| | 24 | 204 | 25.6 | 599 | 13 | BM514271 | BM514271 kx98h01.y |
| | 25 | 204 | 25.6 | 629 | 13 | BM513752 | BM513752 kx98h01.y |
| С | 26 | 203.5 | 25.6 | 547 | 10 | AW124555 | AW124555 UI-M-BH2. |
| | 27 | 203.5 | 25.6 | 570 | 9 | AA220659 | AA220659 my26e06.r |
| | 28 | 203.5 | 25.6 | 688 | 11 | AK003511 | AK003511 Mus muscu |
| | 29 | 203 | 25.5 | 577 | 13 | BM283659 | BM283659 ki50d12.y |
| С | 30 | 202.5 | 25.4 | 535 | 10 | AW987530 | AW987530 uf25f04.x |

OM protein - nucleic search, using frame plus p2n model Run on: June 10, 2003, 11:55:02; Search time 46 Seconds (without alignments) 986.699 Million cell updates/sec Title: US-09-942-407-2 Perfect score: 796 Sequence: 1 MSNEDLFICIDHVAYACPDA.....FMHPKSGKGVLIELTQYPKN 148 Scoring table: BLOSUM62 Xgapop 10.0 , Xgapext 0.5 Ygapop 10.0 , Ygapext 0.5 Fgapop 6.0 , Fgapext 7.0 6.0 , Delext Delop 7.0 Searched: 441362 segs, 153338381 residues Total number of hits satisfying chosen parameters: 882724 Minimum DB seq length: 0 Maximum DB seq length: 2000000000 Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Command line parameters: -MODEL=frame+ p2n.model -DEV=xlh Q=/cgn2_1/USPTO spool/US09942407/runat 04062003 144515 9466/app query.fasta 1.32 -DB=Issued_Patents_NA -QFMT=fastap -SUFFIX=rni -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0 -UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45 -DOCALIGN=200 -THR SCORE=pct -THR MAX=100 -THR MIN=0 -ALIGN=15 -MODE=LOCAL -OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -USER=US09942407_@CGN_1_1 40 @runat 04062003 144515 9466 -NCPU=6 -ICPU=3 -NO_MMAP -LARGEQUERY -NEG SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV TIMEOUT=120 -WARN TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7 -YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7 Database : Issued Patents NA:* 1: /cgn2_6/ptodata/1/ina/5A COMB.seq:* /cgn2 6/ptodata/1/ina/5B COMB.seq:* 3: /cgn2 6/ptodata/1/ina/6A COMB.seq:* 4: /cgn2 6/ptodata/1/ina/6B COMB.seq:* 5: /cgn2 6/ptodata/1/ina/PCTUS COMB.seq:* 6: /cgn2 6/ptodata/1/ina/backfiles1.seg:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

용 Result Query Score Match Length DB ID Description ______ 266 33.4 4403765 4 US-09-103-840A-2 С 1 Sequence 2, Appli 2 266 33.4 4411529 4 US-09-103-840A-1 Sequence 1, Appli С С 3 193 24.2 683 4 US-09-221-017B-170 Sequence 170, App 4 83.5 10.5 33529 4 US-09-144-085-3 Sequence 3, Appli 5 80.5 10.1 525 4 US-09-651-941-12 Sequence 12, Appl 6 80.5 10.1 525 4 US-09-955-597-12 Sequence 12, Appl 7 80.5 10.1 12508 4 US-09-655-270A-1 Sequence 1, Appli 10.1 12523 4 US-09-651-941-1 10.1 12523 4 US-09-955-597-1 8 80.5 Sequence 1, Appli 9 80.5 Sequence 1, Appli 10 80 10.1 1206 4 US-09-153-599A-2 Sequence 2, Appli 11 80 10.1 2299 4 US-09-153-599A-1 Sequence 1, Appli 12 79 9.9 49795 4 US-09-453-702B-60 Sequence 60, Appl 13 78 9.8 4403765 4 US-09-103-840A-2 Sequence 2, Appli 9.8 4411529 4 US-09-103-840A-1 14 78 Sequence 1, Appli 15 77.5 9.7 1338 4 US-08-945-515-2 Sequence 2, Appli 77.5 9.7 16 1519 3 US-08-592-900-1 Sequence 1, Appli 17 74.5 9.4 1287 4 US-09-134-001C-2042 Sequence 2042, Ap 73.5 9.2 4163 4 US-09-004-838-70 18 Sequence 70, Appl 19 73.5 9.2 4208 4 US-09-004-838-1 Sequence 1, Appli 20 73.5 С 9.2 4692 4 US-08-961-527-220 Sequence 220, App 72.5 21 9.1 1153 4 US-08-520-373D-7 Sequence 7, Appli 22 72 9.0 1253 4 US-09-117-257-11 Sequence 11, Appl 23 72 9.0 1253 4 US-08-945-476-11 Sequence 11, Appl 24 72 9.0 1253 4 US-09-489-352-11 Sequence 11, Appl 25 72 9.0 2653 2 US-08-589-711-1 Sequence 1, Appli 26 72 9.0 2653 4 US-09-221-938-1 Sequence 1, Appli 27 72 9.0 2653 4 US-08-945-476-7 Sequence 7, Appli 28 72 2656 4 9.0 US-09-117-257-7 Sequence 7, Appli 29 72 9.0 2656 4 US-09-489-352-7 Sequence 7, Appli 30 71 8.9 1077 4 US-08-945-515-1 Sequence 1, Appli 70 8.8 31 1723 4 US-09-199-637A-135 Sequence 135, App 32 69.5 8.7 1329 4 US-08-945-515-3 Sequence 3, Appli 33 8.7 69 1080 6 5474933-1 Patent No. 5474933 8.7 45546 4 34 69 US-09-146-053-6 Sequence 6, Appli 35 68.5 429 8.6 4 US-09-134-001C-636 Sequence 636, App 36 68 8.5 1434 2 US-08-476-254-1 Sequence 1, Appli 37 68 8.5 11444 2 US-08-222-617A-26 Sequence 26, Appl 38 68 8.5 12364 2 US-08-222-617A-1 Sequence 1, Appli 39 67.5 8.5 525 4 C US-08-858-207A-156 Sequence 156, App c 40 67.5 8.5 1693 3 US-09-320-878-23 Sequence 23, Appl 1935 4 67.5 С 41 8.5 US-09-423-890-5 Sequence 5, Appli 5515 4 42 67.5 С 8.5 US-09-125-642C-8 Sequence 8, Appli 67.5 5519 4 43 С 8.5 US-09-125-642C-12 Sequence 12, Appl 44 67.5 8.5 12047 2 US-09-022-461-1 Sequence 1, Appli 8.5 12047 4 US-09-033-556-3 45 67.5 Sequence 3, Appli

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